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(54) Title: NOVEL PREADIPOCYTE FACTOR-1-LIKE POLYPEPTIDES

(57) Abstract: The present invention discloses open reading frames (ORFs) in human genome encoding for novel Preadipocyte factor-1-like polypeptides, and reagents related thereto including variants, mutants and fragments of said polypeptides, as well as ligands and antagonists directed against them. The invention provides methods for identifying and making these molecules, for preparing pharmaceutical compositions containing them, and for using them in the diagnosis, prevention and treatment of diseases.

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INTERNATIONAL SEARCH REPORT

Application No

PCT/EP 03/51092

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/47

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EBI New Preadipocyte factor-1-like polypeptide 26 February 2002 (2002-02-26), KUO, C. ET AL.: "Human preadipocyte factor-1-like protein fragment #1" XP002293769 Database accession no. AAE13639 the whole document	1-6,8-41
X	-& WO 01/57233 A (ARTERBURN MATTHEW C ; BOYLE BRYAN J (US); HYSEQ INC (US); HALEY DANA A) 9 August 2001 (2001-08-09) page 3, line 5 - page 7, line 19; claims 1,10; sequences 3,4 ----- -/-	1-6,8-41



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

26 August 2004

Date of mailing of the international search report

24. 11. 04

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INTERNATIONAL SEARCH REPORT

Application No

PCT/EP 03/51092

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EBI ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL; Homo sapiens cDNA clone from prostate 12 July 1999 (1999-07-12), SOARES, B. AND BONALDO, F.: XP002293768 Database accession no. AI821058 the whole document	13, 15-17,27
X	DATABASE EBI Fusion protein for treating disease 27 August 2002 (2002-08-27), ROSEN, C.A. AND HASELTINE, W.A.: "Human albumin fusion protein #698" XP002293770 Database accession no. ABG64023 the whole document	1-6,8-41
X	DATABASE EBI Human Secreted Polypeptide 30 December 2002 (2002-12-30), BASINSKI, M.B. ET AL.: "Human LP Polypeptide, LP230S" XP002293771 Database accession no. AAE25350 the whole document	1-6,8-41
A	HEI SOOK SUL ET AL: "REGULATION OF FAT SYNTHESIS AND ADIPOSE DIFFERENTIATION" PROGRESS IN NUCLEIC ACID RESEARCH AND MOLECULAR BIOLOGY, ACADEMIC PRESS, US, vol. 60, 1998, pages 317-345, XP009013918 ISSN: 0079-6603 page 332, paragraph 2 - page 336, paragraph 1	1-6,8-41

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/51092

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 7
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 28, 31, 32 and 35 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 7
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-6, 8-41 (all in part)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claims 28, 31, 32 and 35 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box I.2

Claims Nos.: 7

Present claim 7 relates to a product defined by reference to a desirable characteristic or property, namely to an antagonist of the polypeptides of the invention. The claim covers all products having this characteristic or property, whereas the application does not provide support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for such a product. In the present case, the claim so lacks support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claim also lacks clarity (Article 6 PCT). An attempt is made to define the product by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has not been carried out for claim 7.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/51092

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